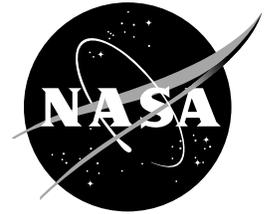


# NASA Facts

National Aeronautics and  
Space Administration



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## Eight Hispanic American Space Explorers

When seeking to learn about the contributions of Hispanic Americans to space exploration, the journey begins with trailblazers such as Rodolfo Neri-Vela, the first Hispanic payload specialist, Franklin Chang-Díaz and Ellen Ochoa, the first Hispanic male and female astronaut in space, and Michael Lopez-Alegria, the first Hispanic American to walk in space.

Currently, eight Hispanic Americans have been chosen to represent our Nation in space. They include:

### Fernando (Frank) Caldeiro

Caldeiro joined NASA in 1991 as a cryogenics and propulsion systems expert for the Safety and Mission Assurance office at the Kennedy Space Center, Fla. Selected as an astronaut candidate in April 1996, he is qualified for flight assignment as a mission specialist and is serving as the lead astronaut for Shuttle software testing at the Space Shuttle Avionics Integration Laboratory.



### Franklin R. Chang-Díaz (Ph.D.)

Chang-Díaz became an astronaut in August 1981, and is a veteran of seven space flights: STS-61-C (1986), STS-34 (1989), STS-46 (1992), STS-60 (1994), STS-75 (1996), STS-91 (1998) and STS-111 (2002). He has logged more than 1,601 hours in space, including 19 hours and 31 minutes in three space walks. He is currently serving as the director of the Advanced Space Propulsion Laboratory at the Johnson Space Center.

### Michael E. Lopez-Alegria (Captain, USN)

A veteran of three space flights, Lopez-Alegria has logged more than 42 days in space, including five EVAs (Extra-Vehicular Activity) totaling 33 hours and 58 minutes. Following his first space flight in 1995, he served as NASA Director of Operations at the Yuri Gagarin Cosmonaut Training Center, Star City, Russia. Lopez-Alegria flew on STS-73 (1995), STS-92 (2000) and STS-113 (2002).

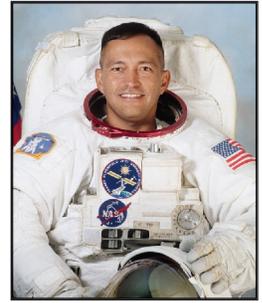


### Christopher J. "Gus" Loria (Lieutenant Colonel, USMC)

Prior to joining NASA's Astronaut Corps in 1996, Loria was assigned as a test pilot and project officer for the Department of the Navy on the X-31 Program at the NASA Dryden Flight Research Facility at Edwards Air Force Base, Calif. He was also a test pilot on Dryden's F/A-18 High Alpha Research Vehicle. In 2002, Loria was assigned to pilot the Space Shuttle on STS-113. However, an injury prevented him from completing his training and resulted in a reassignment.

## Carlos I. Noriega (Lieutenant Colonel, USMC, Ret.)

Selected by NASA in December 1994, Noriega flew as a mission specialist on STS-84 in 1997, NASA's sixth Space Shuttle mission to rendezvous and dock with the Russian space station Mir, and on STS-97 in 2000. He has logged in excess of 460 hours in space, including more than 19 EVA hours in three space walks. Following STS-97, Noriega trained as the backup commander for ISS Expedition Six, and is currently assigned to the crew of STS-119.



## Ellen Ochoa (Ph. D.)

Ochoa, a veteran of four space flights, is presently serving as the deputy director of Flight Crew Operations at the Johnson Space Center. She served as a mission specialist on STS-56 (1993), was the Payload Commander on STS-66 (1994), and was a mission specialist and flight engineer on STS-96 (1999) and STS-110 (2002). A classical flutist and private pilot, she is a co-inventor on three patents for an optical inspection system, an optical object recognition method and a method for noise removal in images.

## John D. Olivas (Ph.D.)

Chosen by NASA as an astronaut candidate in 1998, Olivas currently serves as lead for the Special Purpose Dexterous Manipulator Robot, Mobile Transporter and the Mobile Base System. He previously worked at the Jet Propulsion Laboratory (JPL) as a senior research engineer developing tools and methodologies for nondestructively evaluating materials subjected to space environments, and as Program Manager of JPL's Advanced Interconnect and Manufacturing Assurance Program. Through his career, he has authored and presented numerous papers at technical conferences and in scientific journals and is principal developer of seven inventions.



## George D. Zamka (Lieutenant Colonel, USMC)

A graduate of the U.S. Naval Academy, Zamka reported for Astronaut Candidate training in August 1998. Before joining NASA, he flew the F/A-18 in 66 combat missions over Kuwait and Iraq in Desert Storm, and served as a test pilot at the Naval Air Test Center in Patuxent River, Maryland. Currently, he is assigned to the Shuttle Operations Branch of the Astronaut Office, where he serves as lead on Shuttle systems.

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*Abridged from biographies prepared by the Astronaut Office of the Johnson Space Center. Each astronaut's official biography is available through the Internet at [www.jsc.nasa.gov/Bios/astrobio](http://www.jsc.nasa.gov/Bios/astrobio).*